carrying out the error detecting process or the error correcting process based on the error detecting code or the error correcting code independently added to the control data included in the header portion, it becomes possible to carry out stringent error detection or error correction processes to the control data as well as to more surely receive the control data than the other data.

According to the third radio transmission device, it becomes possible to more stringently carry out the error detection process or the error correction process to the control data than to the other data, to more surely receive only the control data and to carry out the control process of sure data transmission based on the control data.

According to the fourth radio transmission device, because the same control data is repeatedly transmitted, a possibility becomes higher for this transmitted control data to correctly reach the other radio transmission device as well as a possibility becomes higher that transmission from the other transmission device by the control of this radio transmission device within the network system can be correctly carried out, thereby making it possible to favorably control the transmission control.

According to the fifth radio transmission device, in the fourth radio transmission device, by individually adding the error detecting code or the error correcting code by the control data processing unit to every unit of the control data transmitted from the transmission processing unit a plurality of times, the error detecting process or the error correcting process can be carried out on the reception side at every unit of the control data, and a possibility becomes higher that the control data can be more correctly received.

According to the sixth radio transmission device, in a case where the control data and the other data are transmitted with the same packet arrangement or the like, when the decoding of the reception data can not be carried out although each data is appropriately processed, a countermeasure can be taken by transmitting its data again.

Having described preferred embodiments of the present invention with reference to the accompanying drawings, it is to be understood that the present invention is not limited to the above-mentioned embodiments and that various changes and modifications can be effected therein by one skilled in the art without departing from the spirit or scope of the present invention as defined in the appended claims.

What is claimed is:

1. A radio transmission method, comprising the steps of:

transmitting data among a plurality of communication stations with a predetermined packet arrangement;

transmitting control data from one of a communication station of said plurality of communication stations and a control station with said predetermined packet arrangement;

adding one of a predetermined error detecting code and a predetermined error correcting code to said data to be transmitted among said plurality of communication stations with said predetermined packet arrangement; and

adding independently one of an error detecting code and an error correcting code to said control data transmitted with said predetermined packet arrangement.

2. A radio transmission method, comprising the steps of:

transmitting data added with one of a first error detecting code and a first error correcting code among a plurality of communication stations; and

transmitting control data indicating a transmission control of said data, wherein said control data is independently added with one of a second error detecting code and a second error correcting code.

3. A radio transmission method, comprising the steps of:

transmitting data among a plurality of communications stations with a predetermined packet arrangement; and

transmitting control data repeatedly from one of a communication station of said plurality of communication stations and a control station a plurality of times with said predetermined packet arrangement;

adding one of an error detecting code and an error correcting code to each of a plurality of units of said control data transmitted said plurality of times;

performing one of an error detecting process and an error correcting process on a reception side, wherein each of said plurality of units of said control data carries out a control process by utilizing said control data with no error.

4. A radio transmission device, comprising:

a transmission data processing unit for processing data transmitted between said radio transmission device and another said radio transmission device with a predetermined packet arrangement;

a control unit for judging whether control data for an access control is included in a header portion of said predetermined packet arrangement and for performing a corresponding control process; and

one of an error detection processing unit and an error correction processing unit for performing one of a first error detecting process and a first error correcting process by utilizing one of a first predetermined error detecting code and a first predetermined error correcting code, respectively, added to said data with said predetermined packet arrangement and at the same time for performing one of a second error detecting process and a second error correcting process by utilizing one of a second predetermined error detecting code and a second predetermined error correcting code independently added to said control data included in said header portion.

5. A radio transmission device for use in performing radio data transmission between said radio transmission device and another said radio transmission device under a control from a predetermined one of said radio transmission devices, comprising:

one of an error detection processing unit and an error correction processing unit for performing one of a first error detecting process and a first error correcting process by utilizing one of a first error detecting code and a first error correcting code, respectively, added to data transmitted between said radio transmission device and said another radio transmission device and at the same time for performing one of a second error detecting process and a second error correcting process by error utilizing a second error detecting code and a second error correcting code, respectively, independently added to control date for performing access control.

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